

Atty Dkt. No.:10020122-2
USSN: 10/813,639

AMENDMENTS

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In the claims:

Claims 1-29 (Cancelled)

30. **(Currently Amended)** A method of identifying protein/nucleic acid binding pairs, said method comprising:

- (a) contacting a target nucleic acid contacted molecular beacon array comprising a plurality of distinct molecular beacon probes, wherein each distinct probe of said plurality comprises a different probe sequence and all of said probes of said plurality share a common first fluorescent label, with a population of fluorescently labeled proteins to produce a protein bound array, where each member of said population of fluorescently labeled proteins is labeled with a second fluorescent label that makes up a FRET pair with said first fluorescent label; and
- (b) detecting any FRET generated signals from said array to identify protein/nucleic acid binding pairs on said array.

31. **(Previously Presented)** The method according to Claim 30, wherein said method further comprises characterizing the protein of a protein/nucleic acid binding pair identified by said method.

32. **(Previously Presented)** The method according to Claim 30, wherein said method further comprises characterizing the protein binding sequence of a nucleic acid of a protein/nucleic acid binding pair identified by said method.

33. **(Previously Presented)** The method according to Claim 30, wherein said array is contacted with two differentially labeled protein populations.

34. **(Previously Presented)** The method according to Claim 33, wherein said two differentially labeled protein populations make up a test/control pair.

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35. (Previously Presented) The method according to Claim 33, wherein said two differentially labeled protein populations make up a normal/disease pair.

Claims 36-44 (Cancelled)

45. (Previously Presented) The method according to Claim 30, wherein said method further comprises a data transmission step in which a result from a reading of the array is transmitted from a first location to a second location.

46. (Previously Presented) The method according to Claim 45, wherein said second location is a remote location.

Claims 47-51 (Cancelled).

52. (Currently Amended) A method of identifying protein/nucleic acid binding pairs, said method comprising:

(a) contacting a target nucleic acid contacted molecular beacon array comprising a plurality of distinct molecular beacon probes, wherein each distinct probe of said plurality comprises a different probe sequence and all of said probes of said plurality share a common first fluorescent label, with at least one fluorescently labeled protein to produce a protein bound array, where said at least one fluorescently labeled protein is labeled with a second fluorescent label that makes up a FRET pair with said first fluorescent label; and

(b) detecting any FRET generated signals from said array to identify protein/nucleic acid binding pairs on said array.

53. (Cancelled)